SYNTHESIS AND METHODS OF USE OF TETRAHYDROINDOLONE ANALOGUES AND DERIVATIVES

ABSTRACT OF THE DISCLOSURE

A tetrahydroindolone derivative or analogue comprises a 9-atom bicyclic moiety, moiety A, linked through a linker L to a moiety B, where B is a carboxylic acid, a carboxylic acid ester, or a moiety of the structure $N(Y_1)$-D, where Y_1 can be one of a variety of substituents, including hydrogen or alkyl, and D is a moiety that enhances the pharmacological effects, promotes absorption or blood-brain barrier penetration of the derivative or analogue. The moiety A has a six-membered ring fused to a five-membered ring. The moiety A can have one, two, or three nitrogen atoms in the five membered ring. The moiety A can be a tetrahydroindolone moiety. The moiety B can be one of a variety of moieties, including moieties having nootropic activity or other biological or physiological activity.